

MODELS: Fairchild 24J (Army UC-61B) and 24 JS, 4 PCL-SM

T.C. NUMBER: 663

**I - Specifications Pertinent to All Models:**

Engine	Warner Super Scarab Series 50 or 50A (See Item 228)
Placard limits	For all operations: 2050 rpm (145 hp)
Placard speeds (See Item 228)	Level flight or climb - 137 mph True Ind. Glide or dive - 185 mph True Ind. Flaps extended - 94 mph True Ind.
Fuel capacity	40 gallons (two tanks, 20 gallons in each wing) (+24)
Oil capacity	3 gallons (-19)
No. passengers	3 (one front +20, two rear +50)
Baggage	170 lbs. (140 lbs. aft of cabin, 30 lbs. under rear seat)
Certification basis	Type Certificate No. 663
Serial Nos.	3400 and up manufactured prior to 4/27/43, and all AAF Nos. eligible. Approval expired as of 4/27/43.

**EQUIPMENT:**

(Datum is wing leading edge) (\* Means net increase)

**Class I:**

**A. Landplane**

101. Starter (Eclipse Y-150)	13 lbs.	(-24)
102. Battery (Exide 6TS-7-1) in engine compartment	25 lbs.	(-18)
103. 6.50-10 wheels (Warner 3270) with brakes and tires	55 lbs.	(-1)
104. 8 in. streamline tail wheel with heavy		

	duty 6-ply tire (Wheel must be placarded for this size tire.)		(+206)
105.	Engine ring cowl	29 lbs.	(-37)
106.	Hub streamlines	4 lbs.	(0)
107.	Propeller - wood (fixed pitch)	31 lbs.	(-52)
	(See Item 228)		
B.	Seaplane: Items 101, 102, 105, 107, and 209		
	PLUS		
151.	Edo Model 45-2880 floats and water rudders		
152.	Seaplane fin	5 lbs.	(+197)
Class II:			
A.	Landplane		
200.	Miscellaneous items as noted in approved weight and balance report.		
201.	Parachute front seats		
	(a) Irvin	35 lbs.	(+28)
	(b) Switlik	30 lbs.	(+28)
202.	Flares - three 1-1/2 minute	20 lbs.	(+46)
203.	Battery (Exide 6-TS-13-1) - 38 amp	11 lbs.*	(-19)
204.	Bonding	4 lbs.	(+27)
205.	(a) Metalizing and corrosion proofing	12 lbs.	(+39)
	(b) Corrosion proofing	8 lbs.	(+39)
206.	Engine shielding	6 lbs.	(-38)
207.	Pressure fire extinguisher	20 lbs.	(-14)
208.	Seaplane fittings	Neglect weight increase	
209.	Generators		
	(a) Leece-Neville 3CG-3 with control box and adapter	25 lbs.	(-27)
	(b) Bosch LE70/12 B-5 with control box and adapter	17 lbs.	(-27)
	(c) Wind-driven (Air Associates GE-20)	8 lbs.	(+6)
210.	(a) Wheel streamlines	12 lbs.*	(+1)
	(b) Wheel fenders	4 lbs.*	(+1)
211.	Propellers		
	(a) Fixed pitch metal (Curtiss 55511)	19 lbs.*	(-52)
	(b) Adj. metal (Hamilton Standard hub 7056H, blades 19B-1/2-16)	36 lbs.*	(-52)
212.	Landing lights		
	(a) One or two (Grimes ST-250)	4-1/2 lbs. each	(+16)
	(b) Two (Adams-Westlake A-6)	9 lbs.	(+2)
213.	Cabin heater	6 lbs.	(-18)
214.	Cabin ventilator	3 lbs.	(-16)
215.	Dual brake controls	5 lbs.*	(-10)
216.	Miscellaneous extra instruments		
217.	Quick release door hinges	1 lb.	(+7)
218.	Cabin dome light	1 lb.	(+72)
219.	Flaps and controls	39 lbs.*	(+50)
220.	Special upholstery	4 lbs.*	(+37)
221.	Special paint	9 lbs.*	(+45)
222.	Oil cooler (Harrison)	11 lbs.	(-24)
223.	7.50-10 4-ply tires and tubes	6 lbs.*	(-1)
224.	Steerable tail wheel installation	2 lbs.*	(+197)
225.	Radio equipment		
	(a) Receiver (RCA AVR-7 Series) (Chassis under pilot's seat)	34 lbs.	(+18)
	(b) Receiver (RCA AVR-10 Series) (Chassis at instrument panel)	11 lbs.	(+9)
	(c) Receiver (Lear R-3) and Transmitter (Lear T-30) (Receiver and transmitter at instrument panel - power unit under front seat)	30 lbs.	(+10)
	(d) Trailing antenna (Aero. Radio)	9 lbs.	(+106)
226.	Two wing fuel tanks, 30 gallons each (replacing standard tanks)	17 lbs.*	(+24)
227.	Skis		
	(a) Pollack P-3		
	(b) GS-5		
228.	Kinner R-56 engine installation (See NOTE 4)		
	Engine limits for all operations, 1850 rpm (160 hp)		
	Propeller - fixed pitch wood with hub 40 lbs. (-34)		
	Propeller limits - static rpm at maximum permissible throttle setting - not more than 1750, not less than 1750		
	Diameter - not more than 92 in., not		

less than 89 in.  
Airspeed limits:  
Level flight or climb - 137 mph  
True Ind.  
Glide or dive - 175 mph True Ind.  
Flaps extended - 94 mph True Ind.

B. Seaplane: Items 200 thru 207, 209, 211 thru  
214, 216 thru 222, 225, 226 and 228

Class III:  
None

NOTE 1. Inasmuch as the lower longerons, between stations 2 and 2-3/4, of serial numbers 3400 and 3502 thru 3508 incorporate special (overstrength) tubing, the manufacturer must be contacted before these members are repaired or replaced.

NOTE 2. Eligible for export as follows subject to inspection for equipment specified in Chapter XII of Inspection Handbook (4/27/43):

- (a) Canada
  - Landplane and Seaplane
  - Skiplane - not eligible. However, structure complies with Canadian ski gear requirements with a maximum ski height of 9.25 inches and with an overhang on the axle not exceeding that when wheels are installed.
- (b) All other countries except New Zealand.

NOTE 3. In order to be eligible for night operation any UC-61 Series airplane having uncertificated position lights should have them replaced with approved types. If Air Force Type A-9 wing tip lights are installed, they may be used provided the sand-blasted surface on the inside of the cover glass is painted black.

NOTE 4. Eligible with Kinner R-66 engine when converted by means of Kinner Installation Kit. The application for approval must be accompanied by an affidavit to the effect that the alteration has been accomplished in exact accordance with the approved drawings and instructions, and that parts and materials furnished in the kit have been used. Weight and balance should be checked after the alteration to determine that forward C.G. limit of the aircraft has not been exceeded. Upon approval of the alteration the aircraft model designation should be modified by suffixing the letter "K", e.g. Model 24J should be changed to 24JK.

II - Model 24J (Army UC-61B - See NOTE 3), Designation 4 PCIM:

Propeller	Maximum permissible diameter 92 inches
Standard weight	2550 lbs.
C.G. limits	(+16.6) and (+25.9)

III - Model 24JS, Designation 4 PCSM

Propeller	Maximum permissible diameter 100 in.
Standard weight	2750 lbs.
C.G. limits	(+17.2) and (+25.9)